JEVTOVIC, Milojko, inz.

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JEVTOVIC, Milojko, inz. (Beograd, Pozeska 10a)

Tunnel diodes and their application in digital technique. Tehnika Jug 18 no.9:Suppl.:Elektrotehnika 12 no.9:1705-1709 S '63.

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PTA

1480

Jewasinski A. Earth Transportation by Narrow Gauge Trucks.
„Transport ziemi wagonikami waskotorowymi". Bezpieczenstwo i Higiena Pracy. No. 9, 1951, pp. 281—287, 10 figs.

Analysis of circumstances under which accidents occur in serving narrow gauge trucks. Placing trucks on rails. Supporting the trucks during discharge. Instances of trucks jumping the rails. Braking of hand-propelled trucks. Escape of the cradle from the seat and hopper locking device. The shunting of trucks. The coupling of trucks. Unloading trucks from trains and motor lorries. Unauthorised riding on trucks. Disruption of trucks in power traction systems. Correct means of prevention are described.

JEWLEW, Mikolaj, inz.

Calculation of deformations of bars with a variable cross section with the application of the graphic analytical method. Techn lotn 17 no.5:133-135 My '62.

JEWSIEWICKI, Wladyslaw, doc. dr

Revolutionist in cinematographic techniques. Horyz techn 16 no.3: 15-17 '63.

KAWECKA-GRYCZOWA, Alodia; ZABLOCKI, Stefan; VOISE, Waldemar; STASIEWICZ, Irena; ORLOWSKI, Boleslaw; PAZDUR Jan; DOBRZYCKI, Jerzy; BARYCZ, Henryk; SZPILCZYNSKI, Stanislaw; SKARZYNSKI, Boleslaw; PALACZ, Ryszard; WOJCIK, Zbigniew; JEWSIEWICKI, Wladyslaw; PILECKI, Jerzy; RAVETZ, J.R.

Book reviews. Kwart hist nauki i tech 7 no.1/2:147-219 '62.

JEWSIEWICKI, Wladyslaw

Considerations on methods and techniques of historical studies on films. Nauka polska 11 no.2:139-150 Mr-Ap '63.

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Struktura sandur (Structure of sands) by S. Jewuchowicz. Reported in New Books (Nowe Ksiazki.) March 1, 1956.

JEWULA, E.

Evaluation of the operative usefulness of cant hooks. p. 92

SYLWAN (Wydzial Nauk Rolniczych i Lesnych Polskiej Akademii Nauk i Polskie Towarzystwo Lesne) Warszawa, Poland. Vol. 103, no. 3, Mar 1959

Monthly List of East European Accessions (EEAI) LC, Vol. 8, no. 9, September 1959. Uncl.

JEZ, Frantisek, inz.

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1. Ustav pristrojove techniky, Ceskoslovenska akademie ved, Brno.

JEZ, Jozef

Acute chylous peritonitis. Pol. przegl. chir. 37 no.11: 1170-1172 N '65.

1. Z II Oddzialu Chirurgicznego 5 Wojskowego Szpitala Rejonowego w Krakowie (Ordynator: pulkownik dr. A. Bielas)

JEZ, Juliusz

Remarks on employment as a necessary basis for pension allowances.
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Pensions paid by the Social Security Office changed into pensions paid by the Polish Railways Administration. Praca zabezp spol 7 no. 2:30-34 F '65.

M JEZANSKA-TRZEBIATOWSKA, B.

The chemistry of rhenium. B. Jezanska-Trzebiatowska. *Prace Wrocław. Towarzy. Nauk., Ser. B*, No. 36, 30 pp. (1951).—A review with 123 references. L. J. Piotrowski

JEZDIC, V.

"The source of polonium obtained by vacuum sublimation." p. 325. (Priroda, Vol. 18, No. 5 1953, Zagreb).

SO: Monthly List of East European Accessions, Vol. 3, No. 3, Library of Congress, March 1954. Uncl.

RAJNVAJN, Jelena, ing., asistent (Beograd, Kornelija Stankovica 9/I);
JEZDIC, Vojislav, ing., asistent

Application of branded organic compounds in industry. Tehnika Jug 16 no.11:1905-1908 '61.

1. Institute for Nuclear Science "Boris Kidric", Beograd-Vinca.

JEZDIC, Vojislav, ing., Assistant (Beograd, Cvijiceva 68); RAJNVAJN, Jelena, ing., Assistant (Beograd)

Synthesis of labelled compounds and the use of isotopes in organic chemistry. II. Tehnika Jug 17 no.1:132-135 Ja '62.

1. Institute of Nuclear Sciences "Boris Kidric", Beograd-Vinca.
2. Odgovorni urednik, "Radioaktivni izotopi i zracenja" (for Rajnvajn)

(Isotopes)

JEŽDIK, THEODOR

Statická řešení zděných přehrad. [Vyd. 4. rozšířené] Praha, Státní pedagogické nakl., 1952. 167 p. (Učební texty vysokých škol) [Static calculations for brick dams. Bibl, charts, 19 diagrs.]

SO: MONTHLY LIST OF EAST EUROPEAN ACCESSIONS, LC., VOL. 3, NO. 1, Jan. 1954, Uncl.

JEZDIK, T,

ed. Proti kozmopolitizmu a objektivizmu v stavielstve; zbornik prejavov z ideologickej konferencie fakulty inzinierskeho stavitelstva CVUT v Prahe. Pre tlac upravili T. Jezdik a V. Madera. Bratislava, Statne nakladatelstvo technickej literatury. 1954. 115 p. (Against cosmopolitanism and objectivism in building; a collection of reports delivered at the Ideological Conference of the Faculty of Civil Engineering of the Institute of Technology in Prague)

DS Not in DLC

SOURCE: East European Accessions List (EEAL), LC, Vol,5, no. 3, March 1956

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"Activity of the Technical Section of the Czechoslovak Academy of Sciences," P. 4, (TECHNICKE NOVINY, Vol. 2, No. 8, Apr. 1954, Praha, Czechoslovakia)

SO: Monthly List of East European Accessions, (EEAL), LC, Vol. 3, No. 12, Dec. 1954, Uncl.

JEZDIK, T.

Water management after World War II.

p. 142
Vol. 5, no. 5, May 1955
VODNI HOSPODARSTVI
Praha

SO: Monthly List of East European Accessions (EEAL), LC, VOL. 5, no. 3
March 1956

JEZDIK, T.

The first number of Acta technica. In Czech, English, French, German, and Russian. p. 1. (ACTA TECHNICA, Vol. 1, No. 1, 1956, Praha, Czechoslovakia)

SO: Monthly List of East European Accessions (EEAL) LC, Vol. 6, No. 12, Dec 1957. Uncl.

JEZDIK, T.

The 250th anniversary of the engineering school in Prague. p. 129. (Nova Technika, Vol. 2, No. 5, May 1957, Praha, Czechoslovakia)

SO: Monthly List of East European Accessions (EEAL) LC, Vol. 6, No. 8, Aug 1957. Uncl.

JEZDIK, T.

F. Jermar's (Jezy hydrostaticke a jezy automaticke s vyvazenim (Hydrostatic and Automatic Balancing Weirs); a book review.

p. 503 (Inzenyrske Stavby) Vol. 5, no. 9, Sept. 1957, Praha, Czechoslovakia

SO: MONTHLY INDEX OF EAST EUROPEAN ACCESSIONS (EEAI) LC, VOL. 7, NO. 1, JAN. 1958

JEZDIK, T.

Celebrating 250th anniversary of technical schools in Prague. p. 194.
(Hutnicke Listy, Vol. 12, no. 3, March 1957. Brno, Czechoslovakia)

SO: Monthly List of East European Accessions. (EEAL) LC. Vol. 6, No. 6, June 1957. Uncl.

JEZDIK, Theodor, akademik

Delelegation of the Czechoslovak Academy of Scineces in Bulgarian People's Republic. Vestnik CSAV 68 no.5:658-660 '59.

JEZDIK, Theodor, akademik

The 250th anniversary of the engineering school in Prague.
Nova technika 2 no.5:129-133 My '62.

1. Rektor Ceskeho vysokeho uceni technickeho.

JEZDIK, Theodor, akademik

Ten years of the Commission of Water Resources Management of the Czechoslovak Academy of Sciences. Vestnik CSAV 73 no.2:269-272 '64.

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Sixtieth birthday of Josef Maria Jirousek. Vodni hosp 14 no.11: 407 '64.

JEZDIC, V.

Synthesis of thymine-2,4-$^{14}C_2$ and aminothymine-2,4-$^{14}C_2$. Bul Inst Nucl 12:121-125 0 '61.

1. The Institute of Nuclear Sciences "Boris Kidrich," Labelled Compound Department, Vinca.

JEZDIC, V.; RAJNVAJN, J.

Synthesis of urea-^{14}C and thiourea-^{14}C. Bul Inst Nucl 12:127-130 O '61.

1. The Institute of Nuclear Sciences "Boris Kidrich," Labelled Compound Department, Vinca.

JEZDIC,V.; RAJNVAJN, J.

Synthesis of labeled compounds in the Boris Kidric Institute of Nuclear Sciences; abstract. Glas Hem dr 27 no.9/10:530 '64.

1. The Boris Kidric Institute of Nuclear Sciences, Hot-Laboratory Department, Belgrade-Vinca.

JEZDIC,V.; ODALIC,J.

Synthesis of 5-bromouridine; abstract. Glas Hem dr 27 no.9/10: 531 '64

1. The Boris Kidric Institute of Nuclear Sciences, Hot-Laboratory Department, Belgrade-Vinca.

JEZDIC, V.

Synthesis of orotic acid; abstract. Glas Hem dr 27 no.9/10:532 '64.

1. The Boris Kidric Institute of Nuclear Sciences, Hot-Laboratory Department, Belgrade-Vinca.

JEZDIC,V.; PETROVIC,K.

Wet method in the oxidation of organic materials and preparation of samples for radioactive measurements; abstract. Glas Hem dr 27 no.9/10:535-536 '64

1. The Boris Kidric Institute of Nuclear Sciences, Hot-Laboratory Department, Belgrade-Vinca.

L 3704-66 EWT(m) DIAAP
ACCESSION NR: AP5028232 YU/0020/65/000/002/0001/0001

AUTHOR: Jezdic, Vojislav (Senior professional associate, President)

TITLE: Radioisotope production

SOURCE: Nuklearna energija, no. 2, 1965, 1

TOPIC TAGS: radioisotope, chemical labelling, radiation chemistry, nuclear physics research facility, chemical research facility

ABSTRACT: The very widespread application of radioisotopes in the world and the importance of the results attained, postulate in our country too their accelerated introduction in scientific and technological disciplines. One of the conditions supporting a fast development of radioisotope application is the existence of one's own production. Construction of the first nuclear reactors was planned so that they would be of a type to enable a normal production of radioisotopes. A 6.5 Mw reactor, a cyclotron with a charged particles beam (deuterons up to 16 Mev, protons up to 8 Mev, and alpha particles up to 32 Mev) and a planned 200-kw TRIGA Mark reactor are discussed as sources of radioisotopes. Procedures for the production of radioisotopes and labeled compounds were worked out. The necessary laboratories and equipment were constructed to be used both for the production of radioisotopes and labeled compounds, and for their detection and measurements.
Card 1/2

Card 2/2

L 3705-66
ACCESSION NR: AP5028233 YU/0020/65/000/002/0002/0009

AUTHOR: Teofilovski, Cedomir (Section chief of laboratory of high activity chemistry, Graduate engineer, Senior professional associate); Jezdic, Vojislav (Graduate engineer, Senior professional associate)

TITLE: Production of radioisotopes and labelled compounds at the Boris Kidric Institute of Nuclear Sciences

SOURCE: Nuklearna energija, no. 2, 1965, 2-9

TOPIC TAGS: radioisotope, chemical labelling, radiation chemistry, chemical research facility, nuclear physics research facility

ABSTRACT: Research associated with the production of radioisotopes was initiated in 1957. In early 1959 the hot chemistry laboratory was set up to cover the production of radioisotopes, and later the production of labeled compounds. For implementation of the program it was essential to have a number of problems solved: training of staff for work with radioisotopes at high activity levels; technology of material irradiation in the reactor; distribution of radioisotopes and labeled compounds; improvement of known and mastery of new methods for production of radioisotopes and sources of radiation requiring chemical treatment of targets; development and mastery of procedures for the production of labeled compounds;
Card 1/3

L 3705-66
ACCESSION NR: AP5028233

development of a method for the chemical, radiochemical, radiometric, and pharmaceutic control of the products obtained; designing, staffing, and equipping the laboratory; and designing and building of the necessary facilities and shielding for work with radioisotopes at distance and behind the shielding. The hot laboratory produces a number of radioisotopes requiring simple treatment after irradiation in the reactor, such as dissolution of irradiated targets, filtration of the solution, etc. These include radioactive solutions with the isotopes: sup 42 K, sup 24 Na, sup 45 Ca, sup 89 Sr, etc. which were obtained from the irradiated carbonates; sup 60 Co, sup 65 Zn, sup 110 Ag obtained by irradiation of pure metals; and sup 32 P with carrier, sup 141 Ce, and sup 59 Fe produced from irradiated oxides. However, the production of radioisotopes for application in medicine and some investigations requiring a pure radioisotope of high specific activity in most cases without carrier, is more complex. Therefore, their production is associated with a number of radiochemical separations. Work was carried out to make possible a permanent synthesis of a number of labeled compounds needed for research. First, work was conducted on the chemical synthesis of sup 14C-labeled compounds, and later syntheses were initiated with sup 35S and sup 32P; now the synthesis is planned of compounds labeled with other radioisotopes such as sup 3 H, halogens, etc. Procedures were developed for the production of eighteen compounds labeled with sup 14 C, six sup 35 S-labeled compounds and five sup 32P- labeled compounds. In addition to the production of radioisotopes and labeled compounds, distribution also had to

Card 2/3

L 3705-66
ACCESSION NR: AP5028233

be organized in view of the specific packing and shipment requirements for radioactive products. Orig. art. has 5 figures, 7 tables, and 1 graph.

ASSOCIATION: Institut za nuklearne nauke "Boris Kidric" (Institute for Nuclear Science "Boris Kidric")

SUBMITTED: 00 ENCL: 00 SUB CODE: NP, GC

NO REF SOV: 001 OTHER: 004 NA

Card 3/3

DUSEK,J.; JEZDINSKA, V.

The course of healing of experimental myocardial infarction in the rat. Cor vasa 7 no.2:136-142 '65.

1. Department of Pathology, Medical Faculty, Palacky University, Olomouc, Czechoslovakia.

IALAS, M.; JEDDINSKA, V.

A method for the quantitative determination of LH in the urine of women. Cesk. gynek. 44 no.3:160-163 Ap'65.

1. Gyn.-por. klinika (prednosta: doc. dr. F. Gazarek, CSc.); Patol.-anatom. ustav (prednosta: doc. dr. V. Valach) lekarske fakulty Palackeho University v Olomouci.

LENFELD, J.; JEZDINSKY, J.; KROUTIL, M.

Further studies on antipyretic effect of emetine. Cesk. fysiol. 7 no.5: 500-501 Sept 58.

1. Farmakologicky ustav lek. fak. PU, Olomouc.
(EMETINE, effects,
antipyretic in rats (Cz))
(ANTIPYRETICS,
antipyretic eff. of emetine in rats (Cz))

JEZDINSKY, J.; STOJAN, R.

Effect of basopressin on anterior pituitary activity with special reference to inflammation. Cesk. fysiol. 8 no.2:131-133 Mar 59.

1. Farmakologicky ustav experimentalni patologie lek. fak. PU v Olomouci. Predneseno na schuzi Cs. biol. spolecnosti, pobocky v Olomouci, dne 9. rjna 1958.

(VASOPRESSIN, eff.
on anterior pituitary (Cz))
(PITUITARY GLAND, ANTERIOR, eff. of drugs on,
vasopressin (Cz))

STOJAN, B.; DOCKAL, C.; JEZDINSKY, J.

Registration of drop flow by the method of lowering drop size.
Cesk. fysiol. 8 no.2:134-135 Mar 59.

1. Ustav experimentalni patologie, Ustav lekarske fysiky, farmakologicky lek. fak. PU v Olomouci. Predneseno na schuzi Cs. biologicke spolecnosti, pobocky v Olomouci, dne 9. rijna 1958.
(FLUIDS,
registration of drop flow by lowering drop size (Cz))

JEZDINSKY, J.;STOJAN, B.

Role of admixing vasopressin with ACTH and its variability in corticotrofin Spofa. Cesk. fysiol. 8 no.6:555-556 N '59

1. Farmakologicky ustav a Ustav experimentalni patolotie Lek. fak. PU Olomouc.

(CORTICOTROPIN pharmacol.)
(VASOPRESSIN pharmacol.)

JEZDINSKY, J.;STOJAN, B.

Contribution to the value of the effect of ACTH preparations.
Cesk. fysiol. 9 no.1:83-84 Ja 60.

1. Farmakologicky ustav patologicke fysiologie lek. fak. PU, Olomouc.
(CORTICOTROPIN, pharmacol.)

STOJAN, B.; JEZDINSKY, J.

Classification of the currently known factors of the posterior pituitary with anti-inflammatory properties. Cesk.fysiol. 9 no.3: 300 My '60.

1. Ustab patologicke fysiologie a farmakologicky ustav lek. fak. PU, Olomouc.
(PITUITARY GLAND POSTERIOR extracts)

SKULA, E.; JEZDINSKY, J.

Our experiences with the treatment of diseases of the old age with procaine. Cesk. fysiol. 9 no.4:378-379 Jl '60.

1. Osetrovaci ustav OUNZ, Prostejov a Farmakologicky ustav lek. fak. PU, Olomouc.
(PROCAINE ther.)
(GERIATRICS ther.)

SKULA, Eugen; JEZDINSKY, Jaroslav

Our experiences with treatment of diseases of aging with procaine by the Parhon and Aslanova method. Cas.lek.cesk 101 no.4:117-123 26 Ja '62.

1. Osetrovaci ustav OUNZ v Prostejove, reditel MUDr. Eugen Skula; Katedra farmakologie lekarske fakulty PU v Olomouci, prednosta doc. MUDr. Jiri Lenfeld.

(PROCAINE therapy) (AGING)
(ARTERIOSCLEROSIS in old age)

STOJAN, B.; JEZDINSKY, J.

Contribution to the method of titration of melanophore stimulating hormone (MSH). Cesk. farm. 11 no.3:135-138 Mr '62.

1. Ustav patologicke fyziologie lekarske fakulty Palackeho university, Olomouc (prednosta doc. MUDr. J. Hrbek) Farmakologicky ustav lekarske fakulty Palackeho university, Olomouc (prednosta doc. MUDr. J. Lenfeld).
(PITUITARY GLAND POSTERIOR hormones)

CZECHOSLOVAKIA

JEZDINSKY, J., Pharmacological Institute (Farmakologicky ustav), Faculty of Medicine (Lekarska fakulta), Palacky University, Olomouc, Docent Dr J. BERNARD, director, and STOJAN, J., Institute of Pathological Physiology (Ustav patologicke fysiologie), Faculty of Medicine, Palacky University, Olomouc, Docent Dr J. HRNEK, director.

"Influence of the Admixture of Substances From the Posterior Hypophyseal Lobe on the Antiexudative Effect of ACTH Preparations"

Prague, Casopis Lekaru Ceskych, Vol CII, No 22, 31 May 63, pp 593-600.

Abstract [Authors' English summary, modified]: On the basis of previous experiments, which proved the anti-inflammatory effect of substances from the posterior hypophyseal lobe, the authors suggest that the admixture of substances from the posterior hypophyseal lobe to ACTH preparations may participate in the antiexudative effect of these preparations, as confirmed in rats. A removal of the admixture from pre-

1/2

L 13575-66

ACC NR: AP6006058 SOURCE CODE: CZ/0053/65/014/004/0301/0302

AUTHOR: Lenfeld, J.; Jezdinsky, J.; Dusek, J.

ORG: Department of Pharmacology and Pathological Anatomy, Medical Faculty, Palacky University, Olomouc (Katedra farmakologie a patologicke anatomie lek. fak. UP)

TITLE: Effect of caffeine, reserpine and apomorphine on inflammatory changes in rats with damaged adrenal medulla [This paper was presented during the Twelfth Pharmacologic Days, Smolenice, 29 Jan 65.]

SOURCE: Ceskoslovenska fysiologie, v. 14, no. 4, 1965, 301-302

TOPIC TAGS: drug effect pharmacology, nervous system drug, rat

ABSTRACT: In rats who were surgically or chemically (ethanol) adrenomedullectomized, caffeine, reserpine and apomorphine has less of an anti-exudative effect; even reverted. Thus, adrenomedullary catecholamines rather than serotonin, as stated by others, are apparently mediators of anti-exudative effect of reserpine. Orig. art. has: 1 figure. [JPRS]

SUB CODE: 06 / SUBM DATE: none / ORIG REF: 003 / OTH REF: 001

jw
1/1

JEZECK, J.; CIHAL, V.

Precipitate distribution in corrosion-resistant austenitic steels. p. 695.

HUTNICKE LISTY, Brno, Czechoslovakia, Vol. 14, no. 8, Aug. 1959

Monthly list of East European Accessions (EEAI) LC, Vol. 8, No. 10
Oct. 1959
Uncl.

JEZEK, B.

3.

The Use of Inserts in Making Large Cores. B. Jezek. (Hutnik (Prague), 1952, 2, Feb., 48). (In Czech).

A new method of employing steel or aluminium inserts in making large cores is described. A considerable saving in labour and wastage is attained without sacrifice of quality.--P. P.

Immediate source clipping

SMUTEK, Rados, inz. CSc.; JEZDINSKY, Vladimir, inz.

Device for bidimensional measurement of turbulent fluctuations of velocity. Vodohosp cas 12 no.4:433-440 '64.

1. Institute of Hydrodynamics of the Czechoslovak Academy of Sciences, Prague.

RAPOS, Jan; JEZEK, Emil, inz.; KOTALIK, Zdenek, inz.

Use of modern calculation technique in operational planning and control of production. Podn org 18 no. 3:111-115 Mr '64.

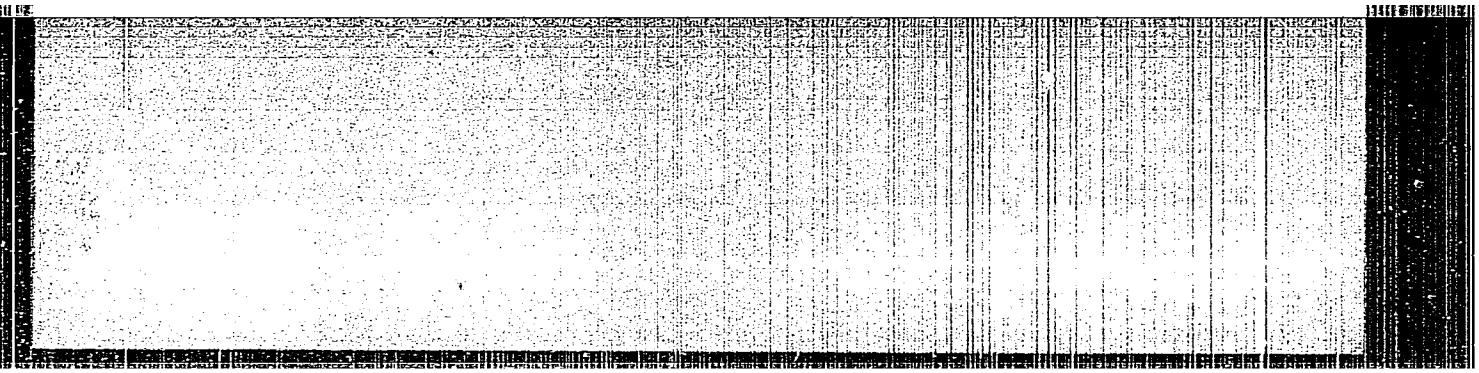
1. Technical and Organizational Research Institute of the Machine Industry.

JEZEK, F.

Equipment is prepared: turn on the switch and start! p.7

OBRANCE VLASTI. Praha, Czechoslovakia. Vol. 3, no. 47, Nov. 1955

Monthly List of East European Accessions (EEAI) LC. Vol. 8, No. 9, September 1959
Uncl.



APPROVED FOR RELEASE: 08/10/2001 CIA-RDP86-00513R000619620007-0"

JEŘEN, JAN

PHASE I BOOK EXPLOITATION Z/6284

Jerie, Jan, ed., Engineer, Doctor, Corresponding Member of the Czechoslovak Academy of Sciences

Základní problémy ve stavbě spalovacích turbin (Basic Problems in the Construction of Gas Turbines [collection of articles]). Prague, Nakl. ČAV, 1962. 627 p. 1600 copies printed.

Sponsoring Agency: Československá akademie věd.

Ed. of Publishing House: Marie Moravcová; Tech. Ed.: František Končický.

PURPOSE: The book is intended to familiarize turbine designers with recent developments in the design of gas turbines and to present some research results which may be helpful in designing more efficient turbines.

COVERAGE: The book comprises articles by leading Czechoslovak turbine experts on thermodynamic cycles, flow research in turbine components, burning of fuel in combustion chambers, axial compressors, and characteristics of turbines manufactured in Czechoslovakia.

Basic Problems in the Construction (Cont.) Z/6284

Card 4/8

JEZEK, Jaroslav, MUDr.

Contribution to the study of chronic bronchitis and emphysema.
Cas. lek. cesk. 95 no.15:406-409 13 April 56.

1. OUNZ Ostrava I. inter. oddel, prednosta prim. Dr. L. Rohacek
technicka cast: Ing. Vratsilav Fibinger, asist. katedry obec.
Stroj. VSB.
(BRONCHITIS
chronic, evaluation of ventilation capacity,
elasticity of pulm. tissue, & cond. of bronchi,
technic. (Cz))
(EMPHYSEMA, PULMONARY, diagnosis
(same)

JEZEK, J., RNDr., Sc.C.; TYKVA, J., inz.

Effect of structural changes upon coercive force of ferromagnetic materials. Strojirenstvi 11 no.12:915-920 D '61.

1. Statni vyzkumny ustav materialu a technologie, Praha.

KOSTAL, Alexandr, inz.; JEZEK, Jaroslav, RNDr., CSc.; OLIVERIOVA, Alena

Aging of the electroconductive alloy Al-Mg-Si-Fe. Hut listy 18 no. 12:879-882 D '63.

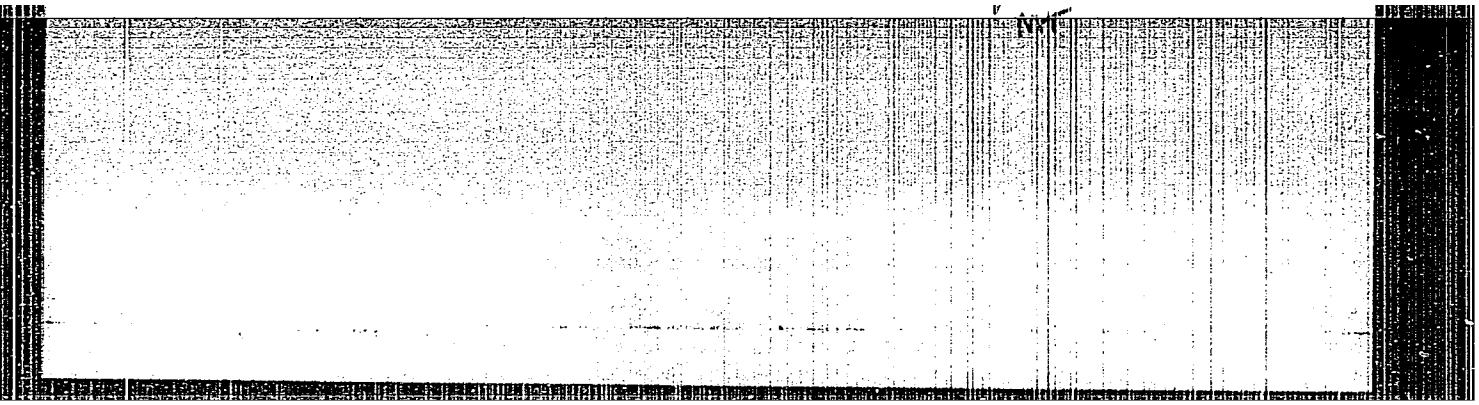
1. Vyzkumny ustav uslechtilych oceli, Praha.

JEZEK, J.

Portable acclimatization equipment. p. 630.
TECHNICKA PRACA, Bratislava, Vol. 6, no. 10, Oct. 1954.

SO: Monthly List of East European Accessions, (EEAL), LC, Vol. 5, No. 6, June 1956, Uncl.

Structure of graphite in cast iron. Jaroslav Jelek and Karel Löbl (VÚMT, Prague). Práce Českoslov. výzkumu



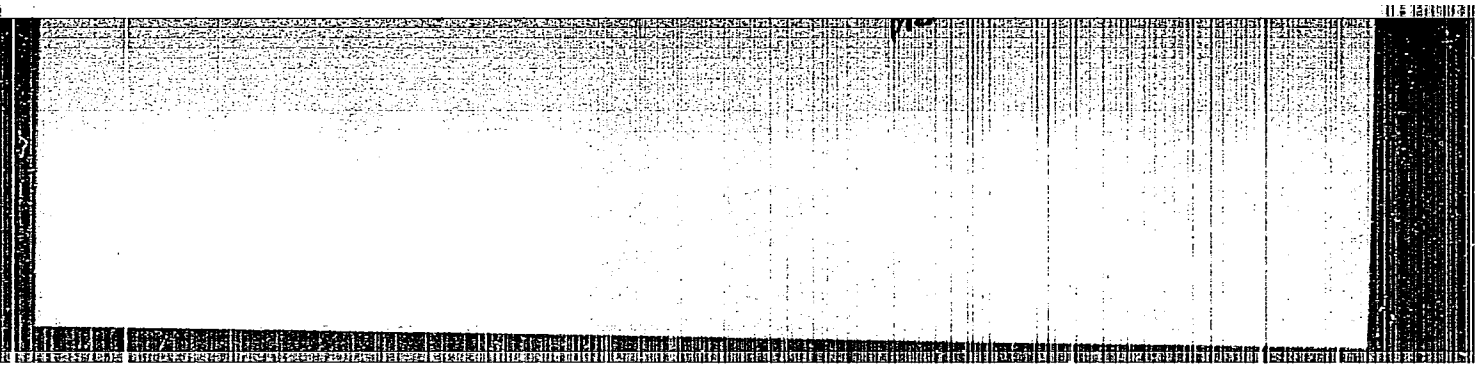
APPROVED FOR RELEASE: 08/10/2001 CIA-RDP86-00513R000619620007-0"

Jezek, J.

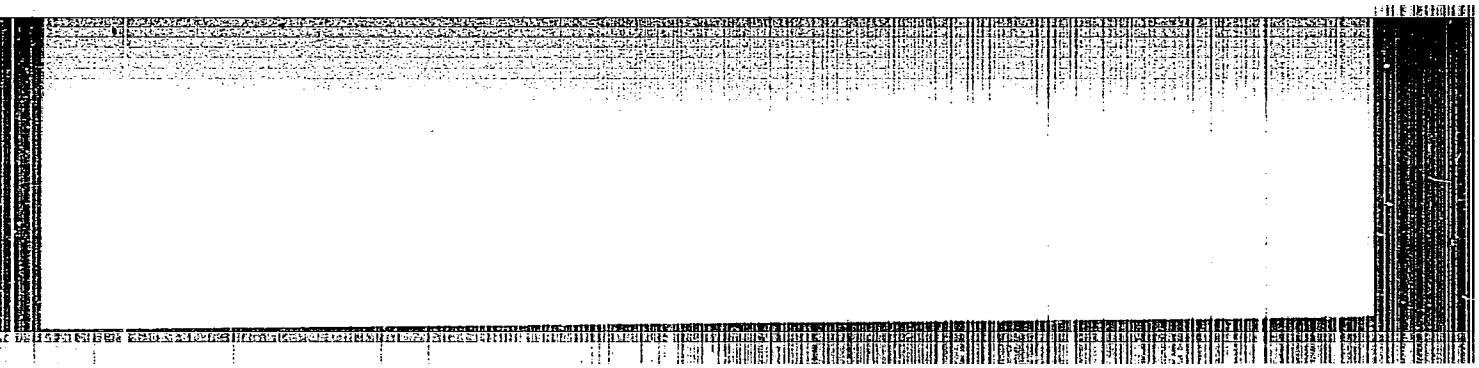
Jezek, J.;;Lobl, K. Contribution to the morphology of graphite in cast iron. Prace. p. 53.

Vol. 4, no. 12, Dec. 1956
SLEVARENSTVI
TECHNOLOGY
Czechoslovakia

So. East European Accessions, Vol. 6, May 1957
No. 5



APPROVED FOR RELEASE: 08/10/2001 CIA-RDP86-00513R000619620007-0"



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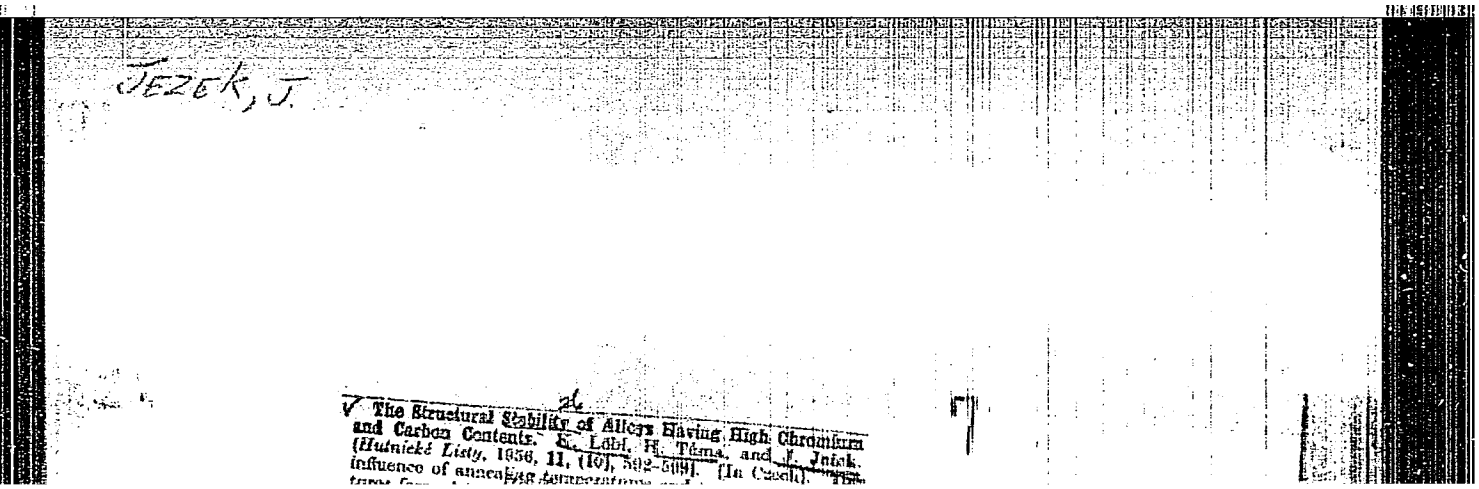
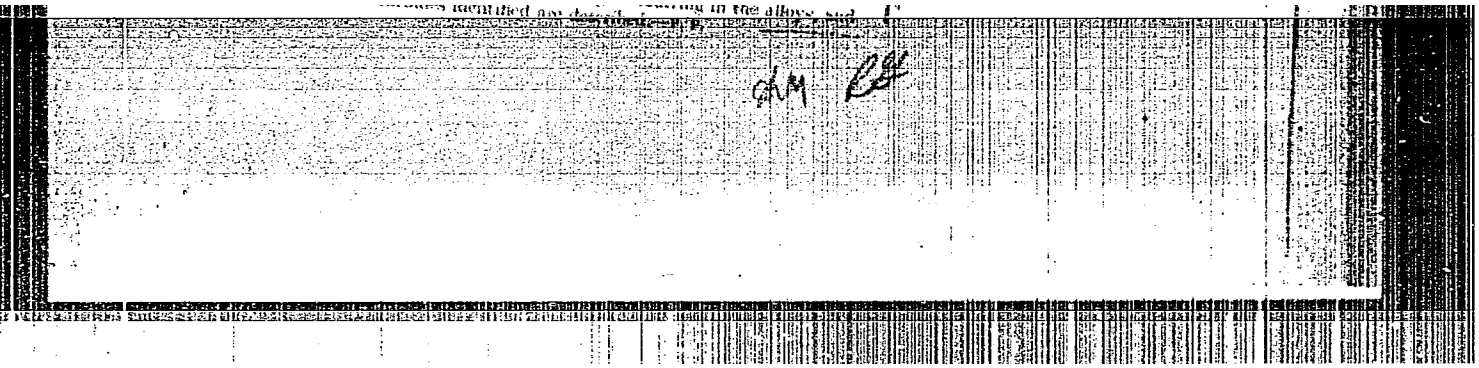


JEZEK, J.

The Structural Stability of Alloys Having High Chromium and Carbon Contents. E. Löbl, H. Těma, and J. Ježek. (*Hutnické Listy*, 1956, **11**, (10), 592-599). [In Czech]. The influence of annealing temperature



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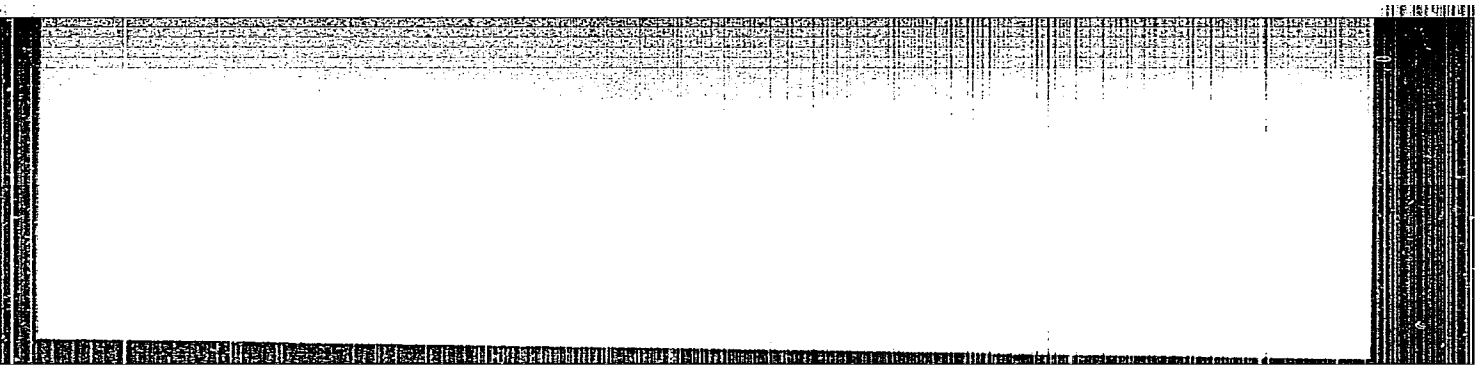

APPROVED FOR RELEASE: 08/10/2001 CIA-RDP86-00513R000619620007-0"

~~YEZHEK, I.~~ JEZEK, J

70-5-16/31

AUTHORS: Yezhek, I., Koritta, I., Doctors of Technical Sciences, ~~Lebl, K.,~~ Candidate of Technical Sciences

TITLE: On the Question of the Morphology of Spherulitic Graphite in High-strength Cast Iron (K voprosu o morfologii sharovidnogo grafita v vysokoprochnom chugune)

PERIODICAL: Kristallografiya, 1957, Vol.2, No.5, pp. 663-669 (USSR).

ABSTRACT: Investigations of graphite which had separated in grey, high-strength and malleable cast irons showed that the flakes had different mutual orientations in each case. In high-strength cast iron the graphite does not separate as spheres but the form is determined by the growth of crystallites in the [10.0] direction. No signs of nuclei were found at the centres of the grains even with the best electron microscopic techniques. Hence, the "nuclei" which can often be seen in optical microscopy must be illusory. The surface layers of spherulitic graphite in specimens of iron from ferrite annealing are shown. It was established that the separate elementary platelets of graphite in carbon of malleableizing are usually 5 to 50 times greater than in grains of cast iron with spherulitic graphite and are of the order of magnitude of the floccular graphite which initially separates in grey iron.

Card1/2 Replicas for microscopic examination in the Czech-made Tesla

On the Question of the Morphology of Spherulitic Graphite in High-Strength Cast Iron.

microscope (resolving power 100 A) were made as follows: specimens were polished with Swedish SIA metallographic polishing paper, then with successively finer grades of diamond powder in glycerin on photographic paper; then they were polished for 1-3 min on polishing discs coated with velvet and covered with a water suspension of alumina from P.F. Duyardin-Tonerde Nos. 1, 2 and 3. The specimens were etched with nital for 20 sec and after washing a drop of 1% collodion in amylacetate was put on the surface. The resulting replica was floated off on hot water and had a thickness of 600-800 A. Plates are shown of floccular graphite in ferrite-pearlite grey iron. The remaining plates are of sections of graphite spherulites.
There are 13 plates, 2 figures, 1 table and 8 non-Slavic references.

ASSOCIATION; Scientific Research Institute for Materials and Technology, Prague.

SUBMITTED: December 9, 1956.

AVAILABLE: Library of Congress

Card 2/2

Distr: 4E2c

Precipitation of carbides and nitrides during drawing of 12% chromium steel low in carbon. Jaroslav Koutský and Jaroslav Ježek. *Hutnické listy* 13, 1098–105(1958).—Processes taking place during the drawing of 12% Cr steel low in C were studied. Besides classical metallographical methods electron-microscopical and radiographical methods were used. It was found that the course and mechanism of carbidic reactions during the martensite decompn. is, in these steels, the same as it is in steels of similar compn. studied by Kuo (*J. Iron Steel Inst.* 184, 258(1956)) and Heikkanen. During this pptn. the different types of carbides do not have the specific shape which would differentiate them one from another. In sorbite and in ferrite acicular pptn. appear during drawing; this was detd. as Cr_2N. This Cr_2N is the only kind of ppt. appearing within the grain of ferrite ϑ. The thermochem. considerations executed show that relatively small amts. of dissolved N will be sufficient for the pptn. of nitrides at temps. under Ac_1. 22 references.

Petr. Schneider

JEZEK, J.

Distr: 4E2c/4E2b(e)

The influence of structure on some properties of high speed steels. Josef Vobořil, Jaroslav Ježek, and Jiří Průcha. *Materiálový Sborník* 1958, 193–210(Pub. 1959).—The structure and properties of 18-4-1 (W–Cr–V), 9-4-2, and 11-4-4 high-speed steels are discussed. Thermal treatment, metallography, and the so-called 2nd hardness are described. In order to study pptn. phenomena, x-ray structure analyses of the sepd. carbides have been made and investigated by electron microscopy. The quality of tool steels is mainly influenced by the structure of the steel and its heat-treatment. The formation of coarse carbide grains with nonhomogenous distribution must be avoided, as it reduces considerably the toughness of the steel. The secondary hardness is caused by the decay of residual austenite and the sepn. of the fibrous ppt. of VC.

F. H. Lieben

4/2

L 31031-66 JXT(BF)

ACC NR: AP6022930 SOURCE CODE: CZ/0024/66/000/001/0007/0013

AUTHOR: Jezek, Jaromir (Engineer); Klimes, Milan (Engineer)

ORG: [Jezek] A. Zapotocky Military Academy, Brno (Vojenska akademie A. Zapotockeho); [Klimes] Geodetic and Cartographic Institute, Brno (Ustav geodesie a kartografie)

TITLE: Electrophotography and electrostatic printing

SOURCE: Geodeticky a kartograficky obzor, no. 1, 1966, 7-13

TOPIC TAGS: electrophotography, electrostatic printer, printing machinery

ABSTRACT: Electrostatic printing, its theory, application, and apparatus commercially available for this purpose are described. A Polish instrument "Pylorys KS 2" suitable for reproductions with dimensions 210x297 mm is described. The price of the instrument is about 40,000 Kcs. The Czech instrument "Xerograf" suitable for reproductions with the dimensions 600x600 mm is described. The Electrofax system, and the individual phases of its operation are discussed. Printing plates "Elfasol" are described and evaluated. This paper was presented by Engineer Miroslav Miksovsky, USGK, Prague. Orig. art. has: 9 figures. [JPRS]

SUB CODE: 14, 09 / SUBM DATE: none / ORIG REF: 002 / SOV REF: 001
OTH REF: 006

Card 1/1 LC

UDC: 528.927:681.64

CZECH/34-59-1-9/28

AUTHORS: Ježek, Jaroslav, RNDr. and Vobořil, Josef, Ing.

TITLE: On the Secondary Hardness of High-Speed Steel
(O sekundární tvrdosti rychlořezné oceli)

PERIODICAL: Hutnické Listy, 1959, Nr 1, pp 47-54 (Czechoslovakia)

ABSTRACT: Structural changes in high-speed steel during its treatment and in normal operation has a decisive influence on the performance and service life of the tool. Study of the pertaining phenomena is particularly important from the point of view of manufacturing cast high-speed steel tools, since such tools are not forged and the desired properties must be achieved by suitable choice of the composition and heat treatment. In order to gain information on the function of individual alloying elements and on the structural changes typical for this material, the authors studied (Ref 2) the formation of precipitates during tempering of the high-speed steel CSN 19 800 (0.82% C, 0.25% Mn, 3.90% Cr, 9.09% W, 1.85% V), particularly as regards the secondary hardness. To obtain information on the changes in the carbide phases, specimens which were quenched from 1240°C in oil were tempered for 2 x 1 hour at temperatures of 100 to 700°C.

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On the Secondary Hardness of High-Speed Steel

After the heat treatment the specimens were cut and one half of each was subjected to electrolytic isolation (Ref 12), whilst the second half was used for other tests. For studying the structural changes, electrolytic isolation and extraction-collodium replicas were used in addition to hardness tests. For analysing the structure of the basic substance and of the precipitates, optical and electron microscopic study as well as X-ray and electron structural analysis were used. Thus, from each specimen an optical structural exposure was made, an electron exposure of the extraction replica and of the isolated substance as well as an X-ray exposure of the isolated substance or the extracted replica and in some cases also an electron diffraction picture was taken of the precipitates on the replica. As check tests X-ray diffraction patterns were made of compact specimens which were etched electrolytically. The exhaustive studies of the changes occurring in this steel during tempering in the temperature range 100 to 700°C revealed that the secondary carbides separate out

CZECH/34-59-1-9/28

On the Secondary Hardness of High-Speed Steel

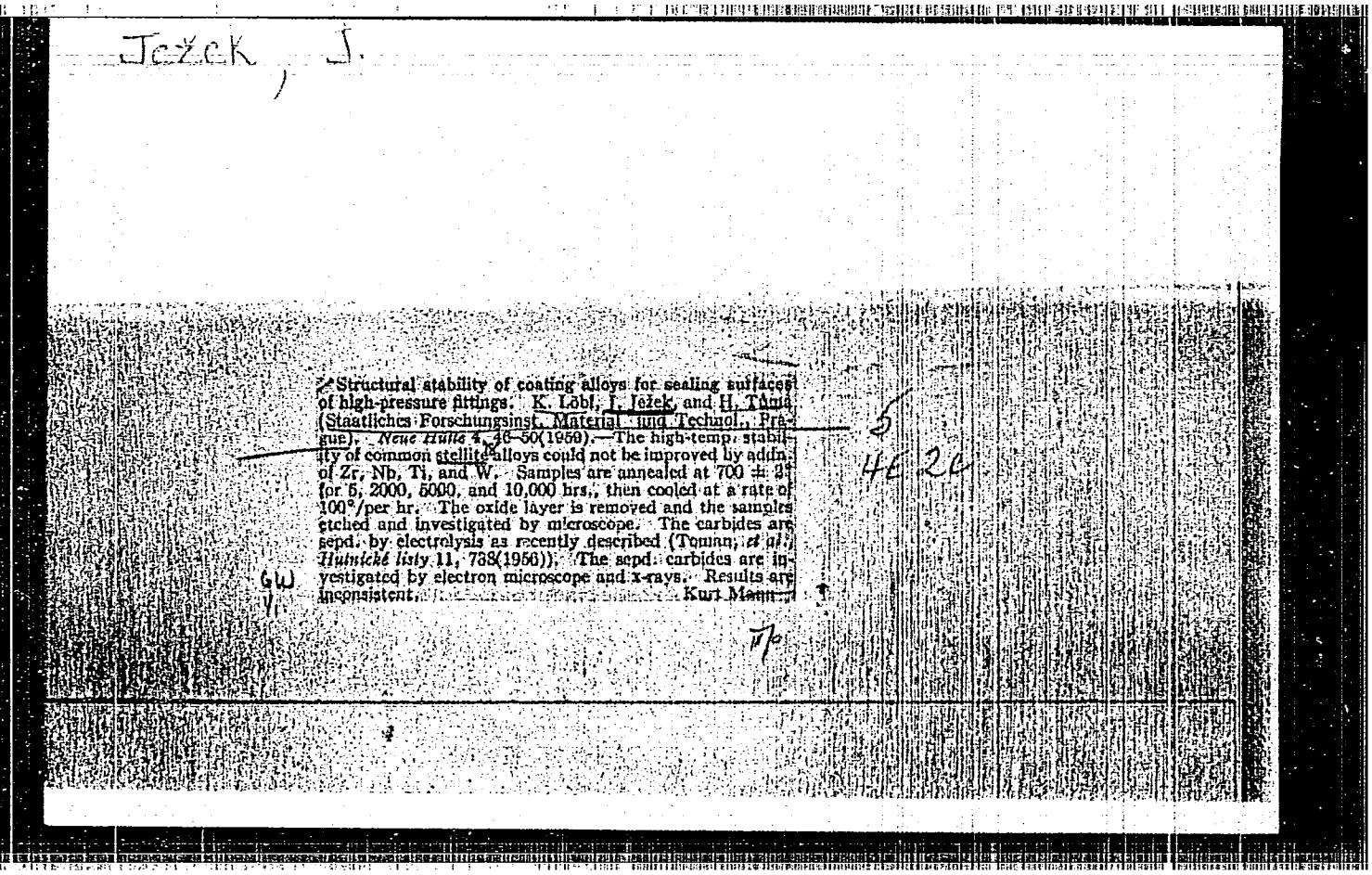
in the following order: Fe_4W_2C, W_2C, Fe_3W_3C, VC.

It was found that the carbide W_2C is present in the structure in the form of a morphologically distinct particle even at 400°C and, therefore, W_2C cannot possibly have a hardening effect on the basic martensite matrix in the range of secondary hardness. It was also found that the transformation of residual austenite into martensite and the beginning of precipitation of fibrous VC contribute to the secondary hardness; it is probable that these two phenomena follow each other and by applying a suitable technique it may be possible to distinguish one from the other. There are 7 figures, 1 table and 23 references, 7 of which are Czech, 10 English, 3 Soviet and 3 German.

ASSOCIATION: Státní výzkumný ústav materiálu a technologie, Praha (State Research Institute for Materials and Technology, Prague)

SUBMITTED: May 30, 1958

Card 3/3



Ježek, J.

Structural stability of coating alloys for sealing surfaces of high-pressure fittings. K. Löbl, J. Ježek, and H. Tůma (Staatliches Forschungsinst. Material- und Technol., Prague). *Neue Hütte* 4, 46–50(1956).—The high-temp. stability of common stellite alloys could not be improved by addn. of Zr, Nb, Ti, and W. Samples are annealed at 700 ± 2° for 5, 2000, 5000, and 10,000 hrs., then cooled at a rate of 100°/per hr. The oxide layer is removed and the samples etched and investigated by microscope. The carbides are sepd. by electrolysis as recently described (Tůma, *et al.*, *Hutnické listy* 11, 738(1956)). The sepd. carbides are investigated by electron microscope and x-rays. Results are inconsistent. Kurt Mann

5
4624

CZECH/34-59-5-19/19

AUTHORS: Ježek, Jaroslav, RNDr., Koutský, Jaroslav, Candidate of Technical Sciences, Ing. and Pluhař, Jaroslav, Ing.Dr.

TITLE: The Nature of the Precipitates which Separate Out from Modified 12% Chromium Steel at Temperatures above 550°C (Podstata precipitátů vylučujících se z modifikovaných 12procentních chromových ocelí v oblasti nad 550°C)

PERIODICAL: Hutnické Listy, 1959, Nr 5, pp 469-472 (Czechoslovakia)

ABSTRACT: (Czechoslovak Metallurgical Research Reports).
The authors studied the precipitates of 12% Cr steels alloyed with small quantities of W, Mo, V and in some cases also Co (full analyses of the tested steels are entered in Table 1, p 469) after various heat treatment procedures, using chemical, electrolytic and extraction separation and electron and X-ray diffraction analyses. It was found that in steels, which in addition to chromium contain tungsten as the main alloying element, the inter-metallic phase Fe_2W separates out from the δ-ferrite and sorbite after long duration annealing. This phase occurs in steels with δ-ferrite as well as in purely martensitic steels and its range of existence

Card 1/2

The Nature of the Precipitates which Separate Out from Modified 12% Chromium Steel at Temperatures above 550°C

extends to the Ac_1 temperatures. In steels which have an increased Mo content and no W the isomorphous inter-metallic phase Fe_2Mo is present, the range of existence of which does not exceed 700°C. In chromium steels which do not have any further alloying additions, a small quantity of the nitride Cr_2N forms in addition to the carbide $(Fe,Cr)_{23}C_6$.

There are 3 figures, 4 tables and 14 references, 10 of which are Czech, 4 English.

ASSOCIATIONS: SVÚMT Prague and VZÚ Závodu V. I. Lenina, Plzeň (V. I. Lenin Works, Pilsen)

SUBMITTED: February 7, 1959

CZECH/34-59-8-9/16

AUTHORS: Čihal, Vladimír, Candidate of Technical Sciences, Engineer
Ježek, Jaroslav, Doctor of Natural Sciences

TITLE: On the Distribution of Precipitates in Stainless Austenitic Steels

PERIODICAL: Hutnické listy, 1959, Nr 8, pp 695 - 700

ABSTRACT: In earlier work (Ref 9) the authors studied the morphology and the structure of precipitates in austenitic stainless steels by X-ray diffraction and electron structure analysis. The precipitation of the chromium carbides $Cr_{26}C_6$ proceeds at first in the shape of two-dimensional dendrites which grow to certain critical dimensions and then become transformed into more stable crystallographically perfect shapes. It was also found by one of the authors that the rejection of fine acicular carbides of titanium, which is controlled by the lower diffusion speed of titanium, is shifted towards higher temperatures (Ref 8). In this paper the authors studied the distribution of precipitates in austenitic stainless steels by means of an electron microscope. For this purpose, extraction replicas had to be used. A simplified

Card1/3

On the Distribution of Precipitates in Stainless Austenitic Steels

method of preparation of extraction replica was applied which was described in an earlier paper of one of the authors (Ref 13). The studies were made on steel of the following composition: 0.05% C, 1.5% Mn, 0.62% Si, 18.48% Cr, 9.34% Ni. The following were studied: the carbide distribution in 18/9 steels; the effect of carbide precipitation on the sensitivity to intercrystallite corrosion and on the impact strength; Cr and Ti carbides in 18/9 steels (in an earlier paper (Ref 17) one of the authors and his team studied the precipitation of Cr and Ti carbides during delta-ferrite decomposition in titanium-stabilised steel of the following composition: 0.08% C, 1.18% Mn, 0.88% Si, 18.24% Cr, 9.25% Ni, 0.21% Mo, 0.8% Ti, 0.003% N); crystalline shape of the chromium carbide $Cr_{23}C_6$. It was found that the chromium carbides precipitate in austenitic steels in the form of discontinuous irregular networks, predominantly on one side of the grain boundaries. The morphology of carbides reproduced in the extraction replica was found to be the same as in isolated

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On the Distribution of Precipitates in Stainless Austenitic Steels

carbides. Extraction-replica methods can be used not only for studying the precipitation phenomena in stainless steel but also for developing new complex-alloyed high-creep-strength steels and alloys. There are 7 figures, 1 table and 21 references, of which 5 are English, 7 German, 9 Czech.

ASSOCIATIONS: Státní výzkumný ústav ochrany materiálu G.V.Akimova (State Research Institute for Protection of Materials (G.V. Akimov))
Státní výzkumný ústav materiálu a technologie, Praha (State Research Institute for Materials and Technology, Prague)

SUBMITTED: April 23, 1959

Card 3/3

CZECH/34-59-9-7/22

AUTHORS: Ježek, Jaroslav, Doctor of Natural Sciences, Voboril, Josef, Engineer, Čihal, Vladimír, Engineer, Candidate of Technical Sciences

TITLE: Nature of the Phases Occurring in the Structure of Brittle Transformer Sheet

PERIODICAL: Hutnické listy, 1959, Nr 9, pp 777-786

ABSTRACT: A comprehensive study of the changes in transformer sheet (4.34% Si, 0.02% C, 0.01% N) based on hardness measurements, thermal analysis, study by optical and electron microscopes , X-ray and electron structure analysis as well as the results of thermo-chemical analysis has shown that nitrogen is the active substance which brings about formation of brittle phases in the basic substance and at the boundary of the ferritic grains. Up to about 250°C it precipitates from the α solid solution in the form of the nitrides $Fe_{16}N_2$-Fe_4N which are embedded in the basic substance. A considerably more dangerous form of separation of a secondary phase caused by nitrogen occurs in the temperature range 250 to 700°C when the nitrides are dissolved again and diffuse, together with silicon, to the boundaries

Card 1/3

Nature of the Phases Occurring in the Structure of Brittle Transformer Sheet

of the ferritic grains, forming there coherent bands of precipitates consisting of Si_3N_4. After annealing at 700°C a compact phase will exist at the grain boundaries, the main composition of which is the nitride Si_3N_4. By annealing at a higher temperature this phase can be made to dissolve again in the basic substance, as a result of which the excessive brittleness of the sheet will be eliminated. On the basis of the obtained results, the following conclusions are drawn relating to the manufacture of transformer sheet: nitrogen present in transformer steel brings about the formation of nitride phases which cause inadmissible brittleness of sheet produced from such steel; such phases can be made to dissolve in the basic ferritic structure by annealing at a temperature above 800°C, followed by rapid cooling (200°C/hour) and, by doing this, it is possible to prevent excessive brittleness of such sheets. Although by so doing it is possible to bring about dissolution of the nitride phases in the basic substance, in many cases such a procedure would require special equipment, quite apart

Nature of the Phases Occurring in the Structure of Brittle Transformer Sheet

from the fact that dissolution of the nitride phases in the basic substance is not favourable from the point of view of the magnetic properties. Therefore, the aim should be to use such processes for manufacturing high grade transformer sheet which prevent the formation of higher nitrogen contents, i.e. in oxygen blast converters. It is possible that in the near future the use of vacuum furnaces with melting off electrodes will become an economic proposition. Acknowledgments are expressed to Engineer P. Schier, Metallurgical Institute, ČSAV, for making an electron microscope available, to J. Ševčíková for her assistance in carrying out the here described work and to Engineer H. Tůma for carrying out the thermal analysis and to Srůta for careful execution of the experimental work relating to the X-ray structural analysis. There are 13 figures, 1 table and 41 references, 6 of which are Czech, 6 German, 26 English and 3 International.

ASSOCIATIONS: SVÚMT, Prague and SVÚOM, Prague
SUBMITTED: May 13, 1959
Card 3/3

JEZEK, J.; LOHI, K.

"Structural changes in surfacing alloys for high-pressure steam fittings." p. 88.

ZVARANIE. (Ministerstvo hutneho prumyslu a rudnych bani a Ministerstvo strojarenstva). Bratislava, Czechoslovakia, Vol. 8, No. 3, Mar. 1959.

Monthly list of East European Accessions (EEAI), LC, Vol. 8, No. 8, August 1959.
Uncla.

Jezek, Jaroslav

The secondary hardness of high-speed steel. Jaroslav Jezek and Josef Vobořil. *Hutnické listy* 14, 47-53 (1959). The electrolytic isolation and extn. of colloidal replica methods were used for the study of structural changes which take place in some high-speed steels, 100-700°. Secondary carbides are sepd. in the following order: Fe_4W_2C, W_2C, Fe_6W_6C, VC. W_2C occurs as a defined particle at 400° and thus it does not have any hardening effect on the basic material of martensite in the region of secondary hardness. Transformation of the remaining austenite to martensite and the beginning of pptn. of the fibrous carbide VC contribute to the secondary hardness. It is obvious that both these phenomena follow one after the other and by application of a suitable method it would be possible to sep. them. 23 references. Petr Schmidt

JEZEK, J.
REHAKOVA, H.

"Dispersion of measurememts and magnitude of errore in X-ray-stress determination in materials."

HUTNICKE LISTY. Brno, Czechoslovakia, Vol. 14, March 1959.

Monthly List of East European Accessions (EEAI), LC. Vol. 8, No. 8, September 1959. Unclas.

JEZEK, J

The essence of precipitates segregating from modified 12% chromium steel in the temperature area above 550°C. Jaroslav Ježek, Jaroslav Koutský, and Jaroslav Pluhař. *Hutnické listy* 14, 469–72(1950).—Chem., electrolytic, and extn. sepn. and electron and x-ray structure analysis were used to exam. the ppts. in 12% Cr steels alloyed with smaller quantities of W, Mo, V, in some cases, Co, and treated under different temp. conditions. In steels in which besides Cr, W occurs as the main alloying element, if subjected to a long-time annealing at service temps., there segregates from δ-ferrite and sorbite the intermetallic phase Fe_2W. The region of pptn. of this phase extends to the temps. Ac_1. In steels with increased content of Mo and without W there occurs the isomorphous intermetallic phase Fe_2Mo, the region of which extends only to lower temps. and does not exceed 700°.

Petr Schneider

JEZEK, J.

A distribution of precipitation in anticorrosive austenitic steels. Vladimír Čihal (Státní výzkumný ústav ochrany materiálu G. V. Akimovn, Prague) and Jaroslav Ježek. *Hutnické listy* 14, 695–700(1959).—Cr carbides in austenitic steels ppt. in the form of a discontinuous irregular net, mostly at one side of grain boundaries. Morphology of carbides, retained in the extn. replica, is the same as in the case of isolated carbides. 21 references. Petr Schneider

S/123/62/000/020/002/007
A006/A101

AUTHORS: Ježek, Jaroslav, Vobořil, Josef

TITLE: Structural changes in aging heat-resistant Ni-Cr-base alloys

PERIODICAL: Referativnyy zhurnal, Mashinostroyeniye, no. 20, 1962, 23, abstract 20B137 ('Materiál. sb. 1960, Část 2", Statní výzkumní ústav materiálu a technol. Praha, 1960, 71 - 94, Czech; summaries in Russian and English)

TEXT: To investigate structural changes occurring in the aging of "Nimonik" 80 and H 35 X15 (N35Kh15) type alloys, the authors used optical and electronic microscopes, X-ray, electron-graphical and differential-thermal analyses. The specimens were annealed at 1,050, 1,150, 1,200, 1,300°C for 2 hours, water-cooled and subjected to aging at 600, 650, 700, 750, 800, 850°C for 1 - 2,000 hours (and in some cases for 5,000 hours). It was found that annealing at 1,150°C caused full dissolving of all phases separated out, and of Cr carbide. Annealing at higher temperatures affects the nature of subsequent dispersion annealing and causes, in particular, early singling out of phases rich in titanium - TiC,

Card 1/2

S/123/62/000/020/002/007
A006/A101

Structural changes in...

Ti(CN). In the process of dispersion annealing at 600 - 650°C chromium carbides (Cr_7C_3) are singled out at the grain boundaries. At about 650°C dispersion annealing temperature, the singling-out of fibrous Ti carbides (carbonitrides) was observed in the grains as well as on the grain boundaries. At about 700°C annealing temperature and more a globular phase distinctly appears, whose amount and particle size increase with higher temperature. X-ray structural analysis shows that the particles represent a γ' phase composed of $Ni_3(Al,Ti)$ and a η phase of Ni_3Ti composition. At later stages of dispersion annealing, recrystallization takes place, whose product is a lamellar mixture of two equilibrium phases γ and η. At annealing temperature as high as about 200°C, a K-structure of an ordered solid solution is formed. In alloys with a high Al content, NiAl-, σ- and N-phases were observed, besides other phases.

S. Palestin

[Abstracter's note: Complete translation]

Card 2/2

Z/056/62/019/008/002/007
I037/I237

AUTHORS: Vystyd, M., Ježek, J., and Keřkovský, O.

TITLE: Regarding brittleness of glow-proof Chrome-Vanadium steel

PERIODICAL: Přehled technické a hospodářské literatury. Hutnictví a strojírenství v. 19, no 8, 466, refabstract HS62-5922 (1960 Praha SVÚMT, STK 12909)

TEXT: Study of basic properties of glow-proof steel for screws CSN 15233. Limit of rigidity at flow. Relaxation properties. Enhancing brittleness by annealing for a period of 10000 hours. The influence of strain on brittleness. There are 2 photos, 18 microphotos, 1 drawing, 21 diagrams, 5 tables ,and 2 references From the collection (p. 25-39). Material collection (Materialovy sbornik) 1960, Part II. Glow-proof, glow-resistant and corrosion-resistant steels and alloys.

[Abstracter's note: Complete translation.]

Card 1/1

JEZEK, J.

80348

Z/034/60/000/07/004/029
E073/E535

18.1130

AUTHORS: Čihal, Vladimír, Engineer, Candidate of Technical Sciences, Gröbner, Pavel, Ježek, Jaroslav, Doctor of Natural Sciences, Pospíšil, Rudolf, Doctor Engineer

TITLE: On the Problem of Intercrystallite Corrosion of Austenitic, Cr-Ni Steels Containing 24% Cr and 19% Ni

PERIODICAL: Hutnické listy, 1960, No 7, pp 518-524

ABSTRACT: This paper is intended to commemorate the 60th birthday of Professor Doctor of Technical Sciences Engineer Josef Teindl, Mining University, Ostrava. Intercrystallite corrosion on austenitic stainless steels is attributed by some authors to the impoverishment of the grains in chromium due to the segregation of carbides at the grain boundaries, others attribute this property to internal stresses caused by the segregated carbides. It is argued in favour of the latter view that intercrystallite corrosion occurs also in steels containing over 20% Cr in which the chromium content of the grain surface layer cannot decrease sufficiently, to be below 12%. The aim of the work

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Z/034/60/000/07/004/029
E073/E535

On the Problem of Intercrystallite Corrosion of Austenitic, Cr-Ni Steels Containing 24% Cr and 19% Ni

described in this paper was to investigate the validity of this argument and to contribute to the elucidation of the problem of intercrystallite corrosion of the austenitic steel 1Cr24Ni19 (0.09% C, 0.4% Mn, 1.5% Si, 23.2% Cr, 18.7% Ni). The higher chromium content can not only prevent a reduction of the chromium content during segregation of carbides at the grain boundaries below the passivation level but, from the theoretical point of view, it should also increase the resistance of the carbides $Cr_{23}C_6$ against dissolution in austenite and thereby reduce the relative quantity of carbon in the solid solution at low austenization temperatures. The steel used in the experiments was produced in a high frequency basic furnace, cast into small ingots from which strips of 25 x 6 mm were forged after machining. On such specimens the tendency to develop intercrystallite corrosion and to separate out chromium carbides in the

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3954

Z/034/60/000/07/004/029
E073/E535

On the Problem of Intercrystallite Corrosion of Austenitic, Cr-Ni Steels Containing 24% Cr and 19% Ni

structure after precipitation annealing was investigated. The conditions of heat treatment of the individual specimens are given in Tables 5 and 6, which also contain data on the intensity of intercrystallite corrosion. In these tables "-" denotes no intercrystallite corrosion, "(+)" denotes very slight intercrystallite corrosion, "+" to "+++" means increasing intercrystallite corrosion. The specimens were first austenitized at 1100°C. Following that, they were precipitation annealed in the temperature range 500 to 850°C. To enable comparison of the influence of the austenization temperature, the remaining specimens were additionally annealed at temperatures between 950 and 1250°C with temperature steps increasing by 50°C. A number of photographs (16) are reproduced which were obtained by means of an electron microscope. The obtained results indicate that in spite of the high average chromium content, the chromium content in the

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